

Montana DEQ Forest Fire Smoke Advisory

September 4, 2007

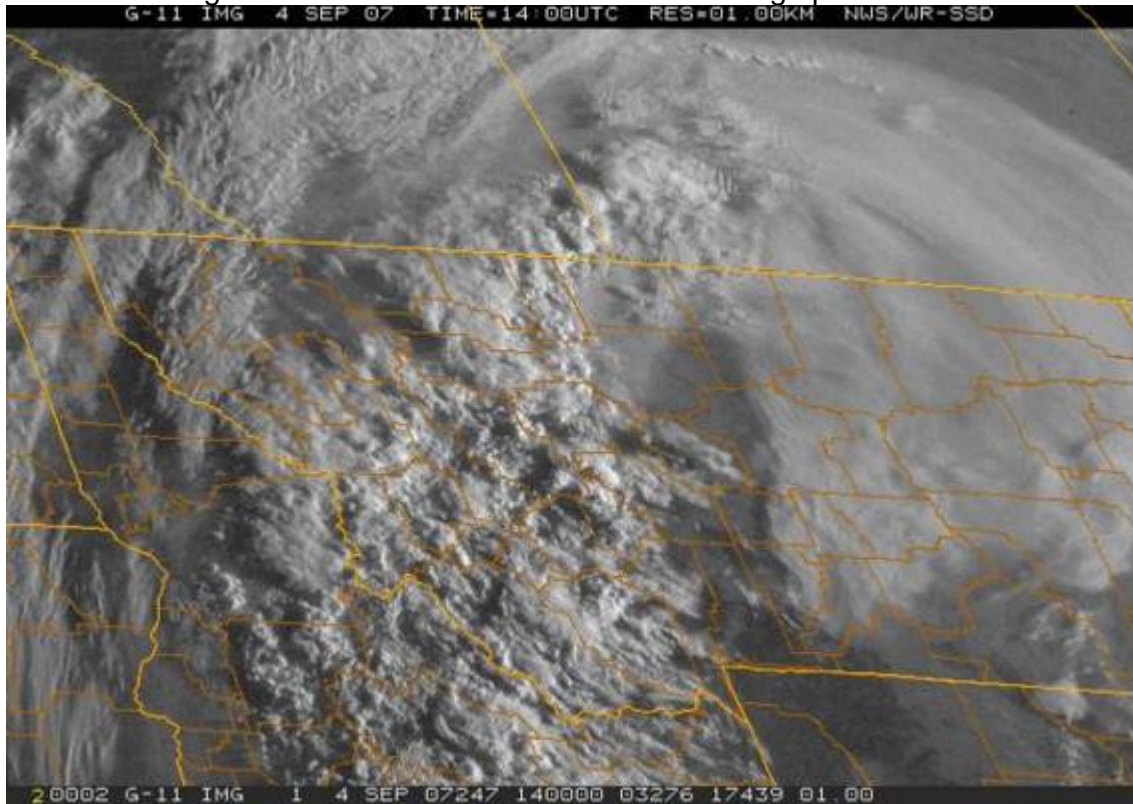
10:00 AM Tuesday

FORECAST:

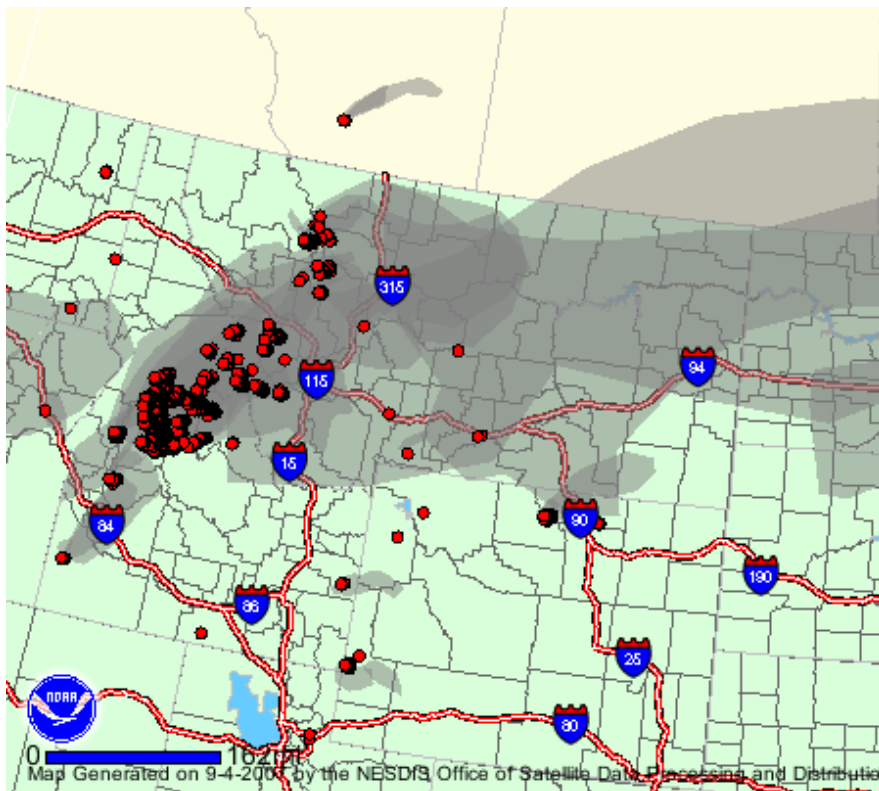
Smoke is trapped in western Montana valley this morning and along the Front Range producing unhealthy smoke levels in many areas. There is big plume of smoke aloft over the eastern half of the state from yesterday's fire activity.

South to southwest winds will be switching around to the northwest later today and tonight ahead of a frontal passage. This should clear the current smoke out of most areas later this evening. Red Flag warning have been posted again today and some areas could see large plume development again this afternoon. Scattered thunderstorms and showers could produce beneficial rains over some of the active fires today and the dispersion should be pretty good in most areas allowing the trapped smoke to mix out this afternoon. Residents noticing smoke from local fires or residual smoke from fires upwind of their location should use the [VISIBILITY GUIDELINES](#) to determine smoke levels in their area and guide their activity decisions.

A morning satellite photo centered on Great Falls is below: Note the plume of smoke covering the eastern half of the state and reaching up into Canada.



This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind (the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last night's satellite coverage).

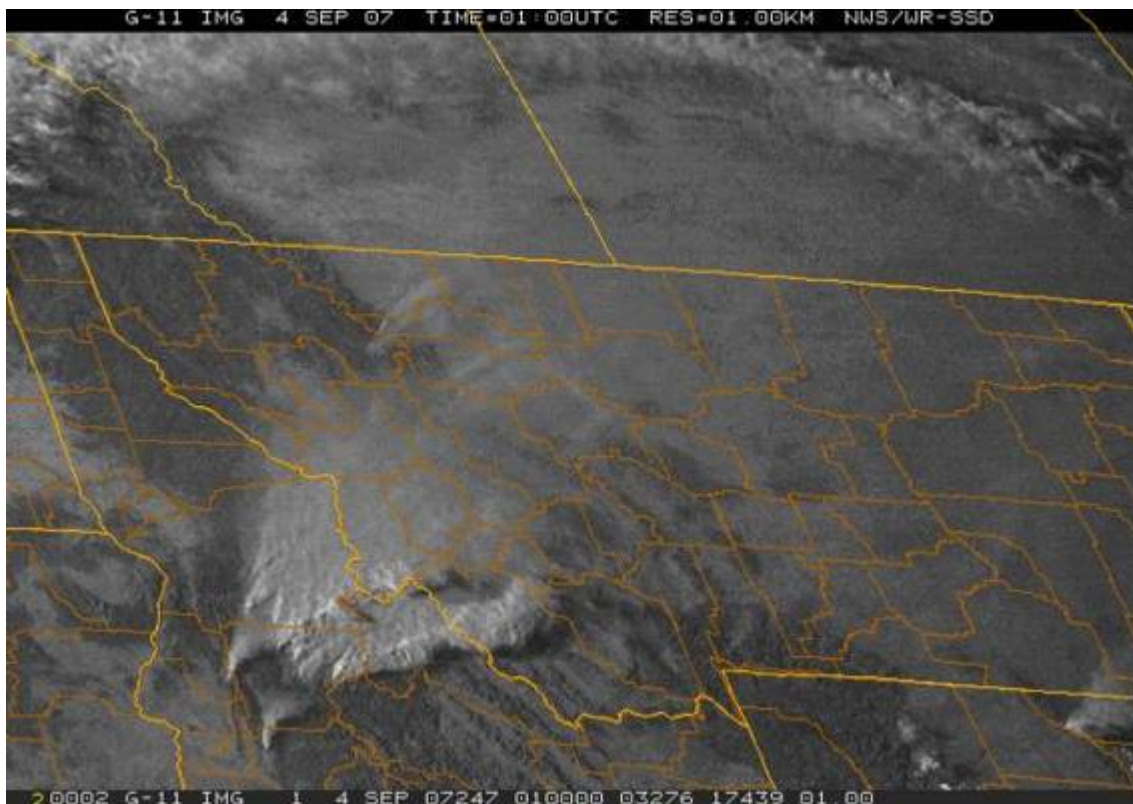


Red indicates hot spot detected. Grey represents smoke seen by satellite.
Fire size is exaggerated for visibility at this scale.

To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lq_fire2.php

This satellite photo taken last night at 7 Pm shows the dramatic plume of smoke from the fires in Idaho and Montana that produce the plume over eastern Montana on this morning's satellite photo above.



This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

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DISCUSSION:

There is big plume of smoke aloft across the eastern half of Montana this morning. This will produce very hazy skies in that area today and there will be some smoke mixing down to the surface there temporarily later today. The smoke left behind at the surface is causing a lot of problems today. [UNHEALTHY](#) concentrations are currently impacting Kalispell, Missoula, Hamilton, Butte, Choteau, and Great Falls. White Fish is at [UNHEALTHY FOR SENSITIVE](#). The Southern Bitterroot is likely at [VERY UNHEALTHY](#) this morning and Hamilton could easily reach that level before noon today. The Big Hole and Rock Creek/Flint Creek valley are also likely at [VERY UNHEALTHY](#). Conditions along the Front Range and in Great Falls should improve today. The northern Flathead and Missoula valleys will also likely improve.

The advisories in the table below represent conditions between midnight and 8 AM and may change substantially through the day. Residents downwind of the active fires and experiencing impacts from residual smoke will need to pay close attention to conditions in their area and use the [visibility guidelines](#) to determine current conditions.

[John Coefield](#)

Meteorologist

Montana Department of Environmental Quality

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

Updated 10 AM September 4, 2007

These advisories represent conditions between midnight and 8 AM and may change substantially through the day

HAZARDOUS	
VERY UNHEALTHY	
UNHEALTHY	Kalispell T1 Missoula T24 Hamilton T24 Butte T24 Choteau T24 Great Falls Vis(2)
UNHEALTHY FOR SENSITIVE GROUPS	Whitefish T8
MODERATE	

T1(x)	One-hour TEOM or BAM value (number of values)
T8(x)	Eight-hour average TEOM or BAM value(number of values)
T24	24 hour average TEOM or BAM value
Vis(x)	Visibility value(number of hours)
Vis(am/pm)	Visibility value from twice/day reporting stations
(est)	estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local [visibility guidelines](#) to evaluate possible health risks and make informed activity decisions.